Modernizing Idaho's Water Infrastructure

An Ongoing Story Series on Idaho Water Resource Board Regional Water Sustainability Projects **Issue No. 1**

City of Nampa Water Re-use Pipeline

Project description: The City of Nampa is in the midst of a major $182 million construction project to increase the capacity of the city's WasteWater Plant by 50 percent.

The plant upgrade ensures that the city will meet EPA phosphorus and temperature standards.

As part of those improvements, the city is building a $24.7 million water re-use pipeline that will divert about 11 million gallons of Class A Recycled Water per day to be used for irrigating city parks and properties in the summer.

The City of Nampa is calling the project the "largest water-recycling" project in the state of Idaho.

Other communities like the city of Moscow, city of McCall and the city of Boise divert recycled water to irrigate crops and/or turf to reduce the amount of treated water being released into public waters.

The water re-use pipeline is 48- inch diameter, high-density polythylene (HDPE) pipe. It will be more than 6,000 feet long to receive Class A Recycled Water from the plant and send it into the Phyllis Canal in the summertime to irrigate city parks and lawns. During the winter, wastewater will be diverted into Indian Creek.

Granite Excavation, a subcontractor for Jacobs Engineering, the main construction contractor for the City of Nampa, works on installing the water re-use pipeline adjacent to the Wastewater Plant. (photo by Steve Stuebner)

Two pump stations will send the recycled water into the city of Nampa's irrigation system. About 5,000 acre-feet of water per year will be diverted for those purposes to reduce waste streams into public waters and recycle water.

The water re-use pipeline will provide about 15 percent of the City of Nampa's irrigation needs in the summer months.

- ***Type of project:*** Water re-use pipeline and related improvements
- ***Location:*** Nampa
- ***Total project cost:*** 24.7M
- ***AIG:*** $3 million
- ***BOR WaterSmart grant:*** $3M
- ***Local cost-share:*** $18M
- ***Start date:*** June 2023
- ***End date:*** 2024

Project benefits:

By diverting Class A Recycled Water into the city's irrigation system, the city of Nampa is reducing the flow of treated water into public waters. The irrigation water will be used on parks and playgrounds, golf courses, landscaping, highway medians and cemeteries.

The city of Nampa also is planning to create a wetland to further treat the water in Indian Creek before it flows into the Boise River.

The City of Nampa received $3M from

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City of Nampa Re-use pipeline (cont.)

Above, aerial view of the water re-use pipeline construction adjacent to the railroad lines. (Photo courtesy Jacobs Engineering)

the Idaho Water Resource Board for the water re-use pipeline. The project was added to the Board's Regional Water Sustainability Project list in July 2023. City officials also requested $2.5 million from the Board for the Copper River Storage Pond and Pump Station Improvements Project and $500,000 for improvements to the Pioneer Irrigation Sytem. Both of those projects have been funded by the Board as well.

The improvements to the Pioneer Irrigation System are tied to the water re-use project. The main aspect will be to install 3.5 miles of 18-inch diameter pipeline next to the Moses Drain to carry water to the city's pressurized irrigation system and benefit downstream irrigators.

The city's total cost for that pipeline project is $1.4 million.

The Copper River Storage Pond and Pump Station will be built on a location in south Nampa, near Lake Lowell.

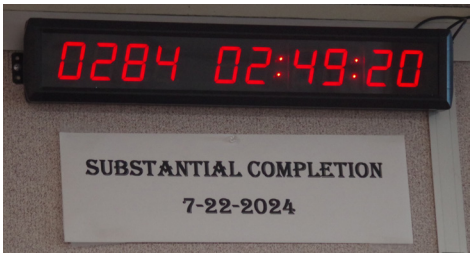
It will:

- Provide irrigation storage for drought and peak use periods.
- The pond will fill during off-peak hours.
- During peak hours, water is pumped from pond storage into the city's pressurized irrigation system.

The benefits of that project include:

- Reducing waste: 34 percent of the surface water is wasted to drains
- Providing improved service during droughts.
- Mitigating impacts to potable water system
- Reducing future water supply needs.

For more information about the City of Nampa water projects, contact Jeff Barnes at barnesj@cityofnampa.us, 208-468-5521, or go to http://cityofnampa.us/recycled water.



An electronic clock reminds everyone on the work site about the project deadline 24/7.